

ABSTRACT OF THE DISCLOSURE

Embodiments of message gates are described. A message gate is the message endpoint for a client or service in a distributed computing environment. A message gate may provide a secure endpoint that sends and receives type-safe messages. Gates may perform the sending and receiving of messages between clients and services using a protocol specified in a service advertisement. In one embodiment, the messages are eXtensible Markup Language (XML) messages. For a client, a message gate represents the authority to use some or all of a service's capabilities. Each capability may be expressed in terms of a message that may be sent to the service. Creation of a message gate may involve an authentication service that generates an authentication credential, and that may negotiate the desired level of security and the set of messages that may be passed between client and service. A message gate may perform verification of messages against a message schema to ensure that the messages are allowed. Message gates may embed the authentication credential in outgoing messages so that the receiving message gate may authenticate the message. Messages may also include information to allow the receiving gate to verify that the message has not been compromised prior to receipt.

20